



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,796	02/17/2006	Hans-Werner Friederich	FRIEDERICH H. ET AL-4 PCT	6434
25889	7590	07/07/2009	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			BRINSON, PATRICK F	
			ART UNIT	PAPER NUMBER
			3754	
			MAIL DATE	DELIVERY MODE
			07/07/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/568,796	Applicant(s) FRIEDERICH ET AL.	
	Examiner Patrick F. Brinson	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-20, 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 10, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/17/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 12, recites the broad recitation the adhesion-imparting intermediate layer consists of a thermoplastic elastomer and a hydrocarbon resin, and the claim also recites particularly an aromatic hydrocarbon resin, which is the narrower statement of the range/limitation. Claims 18 and 23 are likewise rejected.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 11, 15-17 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0821035 to **Ozawa et al.**

The patent to **Ozawa et al.** discloses a hose, fig. 2, comprising a core (2) and a cover (4) having an embedded reinforcement support (3) in the form of a single layer, whereby the core and the cover consist of a thermoplastic elastomer and in each instance, an adhesion-imparting intermediate layer (5, 6) is worked in which can bond to the core and/or cover material and therefore enters into a bond with the reinforcement support, as recited in claim 1. The adhesion-imparting intermediate layer is extruded directly onto the core, and the reinforcement support is laid onto the intermediate layer, as recited in claim 2. Likewise, an adhesion-imparting intermediate layer (6) is extruded directly onto the reinforcement support (3) and the cover is worked on subsequently, as recited in claim 3. Adhesion-imparting intermediate layers (5, 6) are applied to the core and cover, and the reinforcement layer is completely bonded into the intermediate layer, as recited in claim 4. In the case of

multi-layer hoses, adhesion-imparting intermediate layers (4, 7) are applied between individual reinforcement supports, as recited in claim 5. Col. 71 discloses that the thermoplastic resin used for the bonding layer of the hose may be any thermoplastic resin so long as it has bondability with the inner tube and the reinforcing layer, but preferably is a modified olefin thermoplastic resin having a softening temperature of at least 110 °C, as recited in claims 6-8. It is further disclosed that in the case of a polyolefin resin, polyethylene or polypropylene is preferred, as recited in claim 9. Likewise, it is further disclosed that the adhesion-imparting resin may include ethylene methyl acrylate (EMA) or ethylene ethyl acrylate (EEA), as recited in claims 15-17.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14, 18, 19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ozawa et al** in view of U.S. 5,928,782 to **Albrecht**.

The **Ozawa et al.** reference does not disclose the adhesion-imparting layer including a hydrocarbon resin. The patent to **Albrecht** discloses hot melt adhesives

having excellent heat resistance, comprising from about 10% to 30% by weight of at least one copolymer of ethylene methyl acrylate and 20% to 60% by weight of at least one tackifying resin selected from a group including aromatic hydrocarbon. It is further disclosed that the tackifying resins have a softening point between 70° and 150° C. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide to the adhesion-imparting resin of **Ozawa et al.** a hydrocarbon resin, in particular an aromatic hydrocarbon resin, as suggested by **Albrecht** in order to produce a resin that exhibits superior heat resistance and maintains superior bonding performance.

Allowable Subject Matter

3. Claims 8, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The recited references are pertinent to Applicant's invention in disclosing multilayer hoses including reinforcing layers with adhesives and/or hoses including hydrocarbon resins.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Patrick F. Brinson** whose telephone number is (571) 272-4897. The examiner can normally be reached on M-F 7:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Kevin P. Shaver** can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrick F. Brinson/
Primary Examiner, Art Unit 3754

Application/Control Number: 10/568,796
Art Unit: 3754

Page 7

P. F. Brinson
July 6, 2009